South Carolina Cases of HIV and AIDS September 30, 2007												
			AIDS C	`acac		HIV Cases						
County/	AIDS Cases Cumulative Through September 30, 2007				Jan.1-De	c.31,2006	Cumulative TI	Jan.1-Dec	:.31,2006			
District	Cases	Rate	Rank	Deaths	Cases	Rate	Cases	Rate	Rank	Cases	Rate	
Total*	17,222	398.5		7854	738	17.1	22,344	517.1		782	18.1	
Abbeville	32	123.4	44	13			57	219.8	43			
Aiken	312	205.5	33	181	7	4.6	552	363.6	28	18	11.9	
Allendale	51 271	474.5 152.3	11 42	22 134	. 12	6.7	86 415	800.1 233.2	7 42	. 14	7.9	
Anderson Bamberg	110	701.6	2	51	8	51.0	188	1199.0	2	8	51.0	
Barnwell	119	511.5	6	49	13	55.9	177	760.8	11	11	47.3	
Beaufort	277	195.0	37	120	20	14.1	466	328.1	32	22	15.5	
Berkeley	268	176.0	40	121	11	7.2	374	245.6	41	15	9.9	
Calhoun	44	292.8	21 10	21			46	306.1	35 8		40.0	
Charleston Cherokee	1,605 77	483.6 142.9	43	851 38	60	18.1	2,643 111	796.3 206.0	44	65	19.6	
Chester	62	188.6	39	27			108	328.5	31			
Chesterfield	85	196.8	36	44			127	294.0	39	6	13.9	
Clarendon	169	506.9	7	75	8	24.0	240	719.9	13	7	21.0	
Colleton	156	395.3	15	77		40.0	241	610.6	18			
Darlington Dillon	245 109	362.7 351.8	17 18	110 48	9	13.3 29.0	365 182	540.3 587.4	20 19	7 10	10.4 32.3	
Dorchester	252	211.8	32	107	13	10.9	355	298.4	38	14	11.8	
Edgefield	68	269.2	24	33			199	787.8	9			
Fairfield	77	323.4	20	31			115	483.0	22			
Florence	547	416.6	14	258	24	18.3	987	751.7	12	38	28.9	
Georgetown	211	346.7	19	106	6	9.9	328	538.9	21	11	18.1	
Greenville Greenwood	1,069 158	256.3 231.6	25 28	543 66	51 7	12.2 10.3	1,664 288	398.9 422.2	26 25	51 13	12.2 19.1	
Hampton	79	371.5	16	35		10.5	143	672.4	15	6	28.2	
Horry	598	250.7	26	267	32	13.4	1,076	451.2	23	41	17.2	
Jasper	103	472.3	12	52	6	27.5	149	683.2	14	8	36.7	
Kershaw	161	280.0	22	73	14	24.4	252	438.3	24	13	22.6	
Lancaster	129	202.7	35	58	8	12.6	190	298.6	37	9	14.1	
Laurens Lee	137 93	194.7 452.4	38 13	70 37			221 134	314.0 651.8	34 16	7 6	9.9 29.2	
Lexington	517	215.3	31	215	33	13.7	759	316.0	33	30	12.5	
Marion	175	504.6	8	91			264	761.2	10	6	17.3	
Marlboro	142	487.1	9	69			186	638.0	17	6	20.6	
McCormick	28	273.8	23	7			89	870.3	5			
Newberry Oconee	92 68	243.6 96.4	27 46	40 37	10	26.5	143 87	378.7 123.3	27 46	11	29.1	
Orangeburg	531	584.5	40	281	35	38.5	882	970.9	3	42	46.2	
Pickens	126	110.1	45	61	6	5.2	148	129.3	45	8	7.0	
Richland	2,608	748.9	1	1079	136	39.1	4,282	1230.0	1	145	41.6	
Saluda	42	220.4	30	17			58	304.3	36			
Spartanburg	603	222.4	29	282	27	10.0	893	329.4	30	36	13.3	
Sumter Union	623 58	596.6 204.9	34	291 25	29	27.8	953 100	912.6 353.3	4 29	30	28.7	
Williamsburg	210	581.6	5	96	11	30.5	303	839.2	6	14	38.8	
York	331	400.0	41	155	23	11.6	561	0010	40	22	11.1	
Unknown	25			11			157		-			
App I	339		13	171	12	4.8	502	202.0	13	16	6.4	
App II App III	1,195 738	224.8 208.9	9	604 345	57 33	10.7 9.3	1,812 1,104	340.9 312.5	10 11	59 41	11.1 11.6	
Catawba	522	176.6	12	240	33	11.2	859	290.7	12	32	10.8	
Edisto	685	563.6	1	353	46	37.8	1,116	918.1	1	50	41.1	
Low Country	615		7	284	34	15.1	999		7	38	16.9	
Lower Sav	482	259.4	8	252	25	13.5	815	438.6	8		18.3	
Palmetto	3,294		2	1365	181	27.8	5,299		2	190	29.2	
Pee Dee Trident	1,303 2,125	386.8 352.3	<u>4</u> 5	620 1079	53 84	15.7 13.9	2,111 3,372	626.7 559.0	5	73 94	21.7 15.6	
Upper Sav	465		10	206	17	7.8	912	416.3	9	32	14.6	
Waccamaw	1019		6	469	49	14.6	1,707	508.9	6		19.7	
Wateree	1,046	484.7	3	476	55	25.5	1,579	731.6		56	25.9	
Out of State	3,369	N/A	N/A	1,379	59	N/A						
out of state	3,309	IN/A	IN/A	1,379	59	IN/A	<u> </u>	I	I			

Notes:

Data in this quarterly report are provisional. Case rate per 100,000 population based on 2000 census estimates.

Cells with 3 or fewer cases or deaths are set to missing (.).

AIDS cases are included in counts of HIV cases. HIV and AIDS data are categorized by year of diagnosis.

<sup>\*</sup>Out of State AIDS cases are included in "Total" Category.

\*\* Refer to the technical notes for information about the effect of the IDEP (Interstate Duplication Evaluation Project) on AIDS and HIV case counts.

South Carolina Cases of Total Syphilis, Infectious Syphilis, Gonorrhea, and Chlamydia September 30, 2007													
	Total Syphilis Infectious Syphilis							Gonorrhea Chlamydia					
County/	Jan-Sep 2007 Jan-Dec 2006		Jan-Sep 2007 Jan-Dec 2006			Jan-Sep 2007 Jan-Dec 2006			Jan-Sep 2007 Jan-Dec 2006				
District	Cases	Cases	Rate	Cases	Cases	Rate	Cases	Cases	Rate	Cases	Cases	Rate	
Total*	306	415	9.6		69	1.6	7,593	9,202	212.9		19,214	444.6	
					0								
Abbeville Aiken	1 2	2 10	7.7 6.6	0	2	0.0 1.3	22 190	26 245	100.3 161.4	80 471	78 554	300.8 365.0	
Allendale	2	10	9.3	1	0	0.0	26	54	502.4	108	91	846.7	
Anderson	11	17	9.6	0	1	0.6	255	284	159.6	642	411	230.9	
Bamberg	1	2	12.8	0	0	0.0	43	71	452.9	169	187	1193.0	
Barnwell	0	2	8.6	0	0	0.0	39	28	120.4	123	101	434.1	
Beaufort	6	6	4.2	1	1	0.7	187	175	123.2	610	524	368.9	
Berkeley	6	3	2.0	0	0	0.0	160	174	114.3	456	368	241.7	
Calhoun	1	0	0.0	1	0	0.0	13	16	106.5	45	25	166.4	
Charleston Cherokee	21 3	20 5	9.3	8	7 1	2.1 1.9	949 98	1,067 179	321.5 332.2	2073 174	2,027 177	610.7 328.5	
Chester	1	9	27.4	0	1	3.0	80	103	313.3	206	183	556.7	
Chesterfield	0	2	4.6	0	0	0.0	45	62	143.5	182	145	335.7	
Clarendon	5	3	9.0	0	0	0.0	60	63	189.0	204	208	623.9	
Colleton	1	0	0.0	0	0	0.0	70	64	162.2	180	150	380.1	
Darlington	9	12	17.8	2	1	1.5	124	113	167.3	308	237	350.8	
Dillon	0	3	9.7	0	2	6.5	69	100	322.7	175	258	832.7	
Dorchester	4	8	6.7	1	0	0.0	174	185	155.5	569	482	405.1	
Edgefield Fairfield	1	1	4.0 0.0	0	0	0.0	17 37	27 32	106.9 134.4	71 90	72 86	285.0 361.2	
Florence	10	21	16.0	4	2	1.5	344	425	323.7	800	756	575.8	
Georgetown	5	0	0.0	1	0	0.0	100	143	235.0	182	249	409.1	
Greenville	29	33	7.9	3	3	0.7	655	829	198.7	1404	1,467	351.7	
Greenwood	14	20	29.3	0	0	0.0	85	197	288.8	341	268	392.9	
Hampton	1	1	4.7	1	1	4.7	31	32	150.5	122	87	409.1	
Horry	7	24	10.1	3	9	3.8	314	519	217.6	876	922	386.6	
Jasper	1	3	13.8	0	0	0.0	42	44	201.8	108	111	509.0	
Kershaw	5 1	6 6	10.4 9.4	1 0	0	0.0	59 59	73 97	127.0 152.4	234 228	229 230	398.3 361.5	
Lancaster Laurens	3	6	8.5	0	0	0.0	95	94	133.6	273	230	322.6	
Lee	11	7	34.0	2	0	0.0	81	74	359.9	139	126	612.9	
Lexington	14	15	6.2	6	3	1.2	198	230	95.8	620	765	318.5	
Marion	4	8	23.1	0	2	5.8	65	134	386.3	230	266	766.9	
Marlboro	5	3	10.3	1	0	0.0	71	75	257.3	172	149	511.1	
McCormick	0	3	29.3	0	0	0.0	14	8	78.2	51	30	293.4	
Newberry	5	7	18.5	0	0	0.0	74	47	124.5	189	188	497.9	
Oconee	2	1	1.4 16.5	1 0	0 2	0.0 2.2	24 277	37 372	52.4 409.5	117 816	135 756	191.3 832.2	
Orangeburg Pickens	1	15 4	3.5	0	0	0.0	43	63	55.0	185	211	184.4	
Richland	51	63	18.1	27	22	6.3	1067	1,333	382.8	3198	2,840	815.6	
Saluda	1	2	10.5	0	0	0.0	14	20	104.9	64	75	393.5	
Spartanburg	15	17	6.3	2	0	0.0	561	598	220.6	1130	1,086	400.6	
Sumter	20	23	22.0	5	1	1.0	258	258	247.1	671	785	751.7	
Union	3	1	3.5	0	0	0.0	35	52	183.7	129	139	491.1	
Williamsburg	5	7	19.4	0	6	16.6	96	83	229.9		162	448.7	
York Unknown	13 0	13 0	6.5	3	0	1.0	250 23	294 3	147.7	634 52	580 11	291.4	
OTIKITOWIT	U	U	·	U	U		23	3	*	52			
App I	13	18	7.2	1	1	0.4	279	321	129.2	759	546	219.7	
App II	30	37	7.0	3	3	0.6	698	892	167.8	1589	1,678	315.6	
App III	21	23	6.5	3	1	0.3	694	829	234.7	1433	1,402	396.9	
Catawba	15	28	9.5	3	3	1.0	389	494	167.2	1068	993	336.0	
Edisto	6	17	14.0	1	2	1.6	333	459	377.6		968	796.4	
Low Country	9	10	4.5	2	2	0.9	330	315	140.3		872	388.3	
Lower Sav	4	13	7.0	2	2 25	1.1	255	327	176.0		746	401.5	
Palmetto Pee Dee	71 28	85 49	13.1 14.5	33 7	7	3.8 2.1	1376 718	1,642 909	252.6 269.8	4,097 1867	3,879 1,811	596.8 537.6	
Trident	31	31	5.1	9	7	1.2	1283	1,426	236.4	3098	2,877	477.0	
Upper Sav	20	34	15.5	0	0	0.0	247	372	169.8	880	750	342.4	
Waccamaw	17	31	9.2	4	15	4.5	510	745	222.1	1277	1,333	397.4	
Wateree	41	39	18.1	8	1	0.5	458	468	216.8		1,348	624.6	

 <sup>\*</sup> Case rate per 100,000 population based on census estimates.
 \*\* Totals may include individuals for whom county is unknown.

Note: Data are provisional

<sup>\*\*\*</sup>Note: Please see the Technical Notes for an explanation of the increase in Chlamydia and Gonorrhea cases diagnosed.

Note: STD data may not match previously released data due to a change in the reporting system.

Note: Data in this table are tabulated by date of diagnosis, not date of report. This is a change from earlier reports.

Number of cases per 100,000 population. Table 1 AIDS Cases and Annual Rates per 100,000 Population By County Cumulative Totals, Prevalence Rate, Ranked by Rate and Cumulative Deaths\* Rate\*\* Cases Rank Deaths Cases Rate Cases Rate Abbeville 19 72.6 46 10 16.2 Aiken 177.5 29 143 15 7.7 253 11.1 11 Allendale 37 330.0 11 19 5 44.2 # # Anderson 189 114.0 42 96 17 10.4 16 9.7 Bamberg 86 516.3 42 36.8 30.0 6 Barnwell 67 285.4 15 35 5 23.0 10 42.6 91 185 153.0 34 15 13.3 Beaufort 16 13.2 189 Berkeley 132.5 37 96 13 9.1 16 11.2 Calhoun 30 197.6 26 18 # # # # County ranking by rate since 1982. Cumulative number of cases. Note if AIDS/HIV/STD case. Table 8 South Carolina HIV Cases\* by Age Group, Exposure Category, and Sex Cases Diagnosed January - December 1999 and 2000 **Cumulative Totals by Age Group and Exposure Category Cumulative Through June 2001** Males Females Adult/adolescent exposure category\* Jan. 1 - Dec. 31, 1999 Jan. 1 - Dec. 31, 2000 Jan. 1 - Dec. 31, 1999 Jan. 1 - Dec. 31, 2000 Cases Cases Cases % Cases % Men who have sex with men 32% 34% 193 N/A 226 N/A 9% 9% 8% Injecting drug use 67 10% 53 26 29 Men who have sex with men & inject drugs 13 2% 9 1% N/A N/A Hemophilia/coagulation disorder 0% 0% 0% 1% Heterosexual contact 149 23% 116 19% 192 62% 149 48% 19 Sx w/ injecting drug user 15 5 26 Sx w/ bisexual male N/A N/A 7 6 Sx w/ person with hemophilia 2 1 1 Sx w/ transfusion recipient w/HIV Sx w/HIV+ person, risk not specified 127 127 111 157 Receipt of blood transfusion/components 4 1% 0% 2 1% 2 1% Undetermined 199 30% 236 39% 121 39% 130 42% Confirmed Other 0% 0% 0% 0% 607 100% Adult/adolescent subtotal 658 100% 100% 341 100% 312 These figures are a breakdown of the heterosexual

contacts. They are included in the total.

# TECHNICAL NOTES – September 30, 2007

## **Legal Reporting Requirements in South Carolina**

HIV infection and AIDS cases are reportable in South Carolina by law. All physicians, hospitals, laboratories, administrators of health care facilities, charitable or penal institutions, etc., are required to report HIV infections and AIDS cases to DHEC with identifiers (See S.C. Code Ann. Sections 44-29-10, 70, and 80 (Supp. 1989); 24A S.C. Code Ann. Reg. 61-20 (Supp. 1989) and 24A S.C. Code Ann. Reg 61-21 (as amended). All information regarding sexually transmitted diseases including HIV and AIDS, reported to DHEC must be kept strictly confidential (See S.C. Code Ann. Section 44-29-135 (Supp. 1989).

## Surveillance and Reporting in South Carolina

Data in this report are provisional. The data are constantly updated to reflect the most accurate statistics. Reporting delays (time between diagnosis and report to DHEC) are as follows: approximately 84% of all AIDS cases are reported within 3 months of diagnosis; approximately 93% are reported within 6 months of diagnosis; about 95% are reported within 9 months diagnosis; approximately 96% are reported within 12 months of diagnosis; and 4% are reported more than 1 year after diagnosis.

Age group tabulations are based on person's age at diagnosis of HIV or AIDS; adult/adolescent cases include persons 13 years and older; pediatric AIDS cases include children under 13 years of age. Pediatric HIV positive children are not included in the HIV data until they are confirmed HIV positive at 18 months of age.

County tabulations are based on person's country of residence in South Carolina at the time of initial diagnosis of AIDS or HIV infection. For statistical purposes, the county data are never updated to reflect the migratory patterns that may occur. AIDS cases that are diagnosed outside of South Carolina are reflected in the out-of-state category. These cases are deemed out-of-state according to the jurisdiction policies set by the National Centers for Disease Control and Prevention (CDC).

Completeness of AIDS case reporting has been assessed in South Carolina. Findings from a validation study of 1999 hospital discharge data indicated that 97% of the inpatient AIDS-related discharges (cases) had been reported to the DHEC HIV/AIDS Surveillance Program ("Improvements in AIDS Case Reporting, South Carolina" <u>JAMA</u> 1991; 265(3):356).

In July of 2001, the CDC sent states an evaluation program to conduct in HARS on the timeliness of HIV and AIDS reports. The results from the project indicated that the South Carolina HIV/AIDS program was well above the standard of 66% of cases reported within six months of diagnosis. The result from the evaluation determined that the timeliness for HIV reporting was 92.7% and AIDS reporting was 87.2% within 6 months. Several factors contribute to these higher percentages:

1) HIV surveillance has been conducted since February 1986;

- 2) Both physicians and laboratories are required to report positive EIA/WB, CD4 T-Lymphocyte counts of <200 or <14%, and detected HIV RNA and positive DNA viral load results, and
- 3) Active surveillance activities are conducted by regional surveillance coordinators assigned to 4 areas throughout the state.

### **CDC's AIDS Case Definition**

As of January 1, 1993, the National Centers for Disease Control and Prevention (CDC) AIDS case definition has been expanded to include the following AIDS - defining conditions in people with HIV infection:

CD4T-lymphocyte count less than 200/ uL or CD4 T-lymphocyte percent of total lymphocytes less than 14%
Pulmonary tuberculosis (TB disease)
Invasive cervical cancer
Recurrent pneumonia, within a 12 month period

According to the Centers for Disease Control and Prevention (CDCP), the expanded HIV classification system and AIDS surveillance case definition is expected to increase the number of reported cases in 1993 by approximately 75%. The immediate increase in case reporting will largely be attributed to the addition of the severe immunosuppression to the definition.

The number of AIDS cases reported in South Carolina during January - March 1993 compared to January - March 1992 increased by 228%. This large increase was mainly attributable to the implementation of the CDC's Expanded HIV Classification system and AIDS surveillance case definition. This increase is also due to the expansion of surveillance efforts throughout South Carolina by the addition of staff referred to as regional surveillance coordinators. These regional surveillance coordinators are located in the 4 largest cities of the state (Charleston, Columbia, Florence, and Greenville) and are responsible for surveillance in the immediate areas surrounding them.

# **Exposure Categories**

A hierarchy of exposure categories designed by the Centers for Disease Control has always been used for surveillance purposes. Persons with more than one reported mode of exposure are classified in the category listed first in the hierarchy, except for men who have sex with other men and inject drugs. They comprise a separate category. In addition, "undetermined" refers to persons whose mode of exposure to HIV is unknown. This includes persons who are currently under investigation, persons who died before exposure history was obtained, persons who are lost to follow-up, or persons who refused to be interviewed. The large numbers of "undetermined" mode of exposure in the HIV data is attributed to the fact that exposure category information is presently only available on persons reported from DHEC clinics. Consequently, this caveat should be taken into consideration when using the HIV exposure category data. In the future, DHEC will be using a combined HIV/AIDS report form designed by the Centers for Disease Control that will allow us to collect mode of exposure for HIV infection in both DHEC clinics and non-DHEC settings.

#### Rates

Some rates in this report are cumulative rates; they are on a cumulative basis per 100,000 population. The numerators for computing the cumulative rate are based on the cumulative number of AIDS cases or HIV infection by county of residence. The denominators for computing rates are based on estimates of the 2000 census data (Division of Research and Statistical Services, State Data Center, South Carolina Budget and Control Board). Each rate is computed as the cumulative number of cases divided by the current year estimated population, multiplied by 100,000. Incidence rates are also included. The numerators for incidence rates are based on the number of AIDS cases or HIV infection during the year of report. Incidence rates are computed as the number of cases in the report year divided by the current year estimated population, multiplied by 100,000.

# AIDS CASE RESIDENCY AND DEDUPLICATION EFFORTS

## **AIDS and HIV Case Reporting**

All states and U.S. territories have some form of HIV/AIDS reporting that incorporates reporting by individual medical care providers and/or laboratories conducting HIV related tests. This national effort enables public health surveillance staff to track the scope of the AIDS epidemic. It also allows the federal government to allocate funds equitably to the states for the care of people with HIV and AIDS who cannot pay for all or part of their treatment.

All states and areas have been reporting AIDS cases since 1986. Because of advances in treatment that have extended the time between HIV infection and a diagnosis of AIDS, states began instituting HIV reporting in 1985 as a way of understanding how the epidemic has changed and the progress of HIV disease. However, HIV case reporting is currently less standardized than AIDS case reporting. Some areas or states have only recently implemented HIV reporting and this reporting is not consistent across all areas. Therefore, AIDS case reports (also called surveillance data) are considered the only nationally representative data source for the epidemic.

## **Potential for Duplication**

The potential for duplication has become more of an issue because of the mobility of our society and also because of the success of treatment for HIV and AIDS. Persons with HIV or AIDS may move for reasons related to their infection, for example, to be near family or friends, to seek social support services, to seek more knowledgeable physicians, to seek experimental drug programs, or because of inability to work due to HIV disease. With the advent and success of highly active antiretroviral therapy (HAART), those persons living relatively healthy lives may move for reasons unrelated to HIV or AIDS – to seek out new job opportunities or simply to fulfill a dream of living in a different place. This mobility increases the challenge of avoiding duplication in counting persons with AIDS across different jurisdictions throughout the US.

To counter the potential problem of duplication, CDC initiated the Interstate **Duplication Evaluation Project (IDEP) in 2002.** This considerable effort compared patient

records in the national database across states in order to identify potential duplicate cases. The following process was used.

- 1. CDC reviewed the national case reports sent to CDC through December 2001 for duplications. Because CDC does not receive names of patients, a match of information consisting of soundex (which is a code for the last name), date of birth, and gender identified potential duplications.
- 2. CDC provided states with a listing of all cases that were potential duplicates from other states. CDC also included additional supporting information such as diagnosis and death dates to assist states in their attempts to determine whether persons were the same or different individuals.
- 3. States contacted each other to compare their patient profiles along with additional information available at the state level that is not reported to CDC.
- 4. Based on their discussions, the states decided whether the cases represented the same person. If they did, the states determined the state of residency at the date of diagnosis.
- 5. The states forwarded these decisions to CDC, which returned them, after processing and quality control, to the states for updating their surveillance databases.

After de-duplication, the numbers of cumulative diagnosed AIDS cases in individual states will most likely decrease, as will the overall national numbers. CDC estimates that the decreases on the national level will be less than 5% of the AIDS cases reported over the entire history of the HIV epidemic.

How has this de-duplication effort affected the states' numbers of AIDS cases? Preliminary data suggest that there are, on average about 300 duplicate cumulative AIDS cases per state, although that ranged from 0 to over 3000 for individual states. This means that, again on average, that there were about 5% duplicate AIDS cases per state, although that ranged from 0 to 10%.

#### INCREASE IN CASES OF DIAGNOSED CHLAMYDIA

There is a noticeable increase in the number of diagnosed cases of Chlamydia starting in 2004. This is due in part to a new test assay being used that is more sensitive. The new test being used this year (Aptima) has enabled better detection of Chlamydia, and, therefore more cases are being diagnosed that would have been previously undetected. There is also an increase in the number of providers reporting Chlamydia cases in 2004.

In May 2007, DHEC began name-based reporting of Chlamydia and Gonorrhea tests from DHEC clinics, implementing a system in which positive Chlamydia and Gonorrhea tests were electronically imported from the state lab. In August 2007, name-based reporting was initiated for private providers. The move to name-based reporting and changes in the way case morbidity is captured resulted in an increase in incidence in both diseases, with markedly large increases in Chlamydia cases. Please interpret trend data with caution.